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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/609,303

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Bryan Comeau

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AGFA CORPORATION  
PATENT DEPARTMENT  
200 BALLARDVALE STREET  
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EXAMINER

PHAM, HAI CHI

ART UNIT

PAPER NUMBER

2861

MAIL DATE

DELIVERY MODE

07/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/609,303

**Applicant(s)**

COMEAU ET AL.

**Examiner**

Hai C. Pham

**Art Unit**

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/08/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/07/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen et al. (Pub. US 2003/0189633).

With regard to claim 1, Allen et al. discloses a calibration system for determining whether an imaging system is in a proper operating condition, said system comprising an illumination modulator (reflective grating light valve 14 as light modulator) for providing a desired modulated illumination field at an image surface (recording medium 18), a detection unit (calibration unit 20) including a slit opening (slit 26) for receiving a portion of said modulated illumination field (slit opening 26 receives one pixel at a time

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as the pixels are scanned past the slit) (Figs. 1-2), average power sample means (e.g., signal processor 48 for processing the signal outputted by the detector included in the calibration unit 20) (Fig. 6) for determining the average power sample value (mean value of the peaks intensity of the pixels as detected by the detector) of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening ([0025]) and for determining whether said average power sample value has changed significantly since a previous scan ([0031]), and variation power sample means for determining the variation in power sample values of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening (the deviation error of the peak intensity of each pixel is defined based on the pre-selected target peak amplitude and an adjustment is made to the pixel in successive iteration so as to reduce the deviation) ([0026]) and for determining whether said variation in power sample values has changed significantly since a previous scan ([0029]).

With regard to claim 7, Allen et al. further teaches average power sample means for determining the average power sample value of a set of scans of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening and for determining whether said average power sample value has changed significantly since a previous set of scans (the mean value is determined based on a set of four separate scans) ([0025]), and variation power sample means for determining the variation in power sample values of a set of scans of said modulated illumination field as said modulated illumination field is moved with respect to said slit opening and for determining whether said variation in power sample values has changed significantly

since a previous set of scans (the deviation error of the peak intensity of each pixel is defined based on the set of four separate scans).

Allen et al. further teaches:

- (regarding claims 2 and 8) the illumination modulator including a grating light valve (reflective grating light valve 14),
- (regarding claims 3 and 9) the average power sample means includes an average power sample value for a prior scan or set of scans (the mean value of each pixel is determined in successive scan iteration),
- (regarding claims 4 and 10) said variation power sample means includes information indicative of a variation in power sample values for a prior scan or set of scan ([0029]),
- (regarding claims 5 and 11) said variation power sample means includes maximum and minimum sample values for a previous scan ([0025]),
- (regarding claims 6 and 12) said variation power sample means includes maximum and minimum sample values for a grating light valve shutter (the maximum and minimum peak values are determined for each pixel corresponding to each element of the grating light valve until the entire illumination line is performed) ([0025]).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al.

Allen et al. discloses all the basic limitations of the claimed invention including the average power sample value and the variation in power sample values of a set of scans being determined for a set of four scans ([0025]), but fails to teach the sampling being performed for a set of five scans. It would have been obvious to one having ordinary skill in the art at the time the invention was made to set the measurement of the average power sample value and the variation in power sample values be performed based on a set of five scans as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HAI PHAM  
PRIMARY EXAMINER  
July 9, 2007